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CLAIMS:

What is claimed is:

1. A method for executing a function on a server in a distributed data processing system, the method comprising the computer-implemented steps of:

- receiving a request for a function, wherein the request comprises an input specifying a server name, wherein the server responds to requests directed to a set of server names; and
- executing the function in a server name context on the server as directed by the input specifying the server name.

1 2. The method of claim 1 wherein the server name
2 context on the server comprises a set of resources
3 associated with a server name.

1 3. The method of claim 2 further comprising identifying
2 a membership of a resource within the set of resources
3 for the server name context.

1 4. The method of claim 3 further comprising generating
2 a server name tag for the server name, wherein the
3 membership of the resource in the set of resources is
4 identifiable by the server name tag associatively stored
5 with the resource.

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1 5. The method of claim 4 wherein the server name tag is
2 generated based on a value of the server name and a value
3 derived from a data structure that stores the server
4 name.

1 6. The method of claim 5 wherein the value derived from
2 the data structure is a position value of the server name
3 within a server name table that stores the set of server
4 names.

1 7. The method of claim 1 wherein the request for the
2 function is received from a network.

1 33/8. The method of claim 1 further comprising:
2 locating the server name in an entry of a server
3 name table;
4 obtaining a location index for the entry; and
5 generating a server name mask based on the location
6 index.

1 9. The method of claim 1 further comprising:
2 generating a server name mask based on the server
3 name;
4 retrieving a server name mask for a resource from a
5 resource data structure; and
6 comparing the generated server name mask with the
7 retrieved server name mask to identify whether the
8 resource is applicable to the server name.

1 10. The method of claim 9 further comprising:

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2         repeatedly identifying a plurality of resources that
3 are applicable to the server name by searching a
4 plurality of resource data structures for matching server
5 name masks.
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154/12. A data processing system comprising:

1 13. The data processing system of claim 12 wherein the
2 server name context on the server comprises a set of
3 resources associated with a server name.

1 14. The data processing system of claim 13 further
2 comprising identification means for identifying a
3 membership of a resource within the set of resources for
4 the server name context.

1 15. The data processing system of claim 14 further
2 comprising generation means for generating a server name
3 tag for the server name, wherein the membership of the

4 resource in the set of resources is identifiable by the
5 server name tag associatively stored with the resource.

1 17. The data processing system of claim 16 wherein the
2 value derived from the data structure is a position value
3 of the server name within a server name table that stores
4 the set of server names.

1 19. The data processing system of claim 12 further
2 comprising:
3 generating means for generating a server name mask
4 based on the server name;
5 retrieving means for retrieving a server name mask
6 for a resource from a resource data structure; and

7 comparing means for comparing the generated server
8 name mask with the retrieved server name mask to identify
9 whether the resource is applicable to the server name.

19 21. A computer program product on a computer readable
20 medium for use in a data processing system, the computer
21 program product comprising:
22 first instructions for receiving a request for a
23 function, wherein the request comprises an input
24 specifying a server name, wherein the server responds to
25 requests directed to a set of server names; and
26 second instructions for executing the function in a
27 server name context on the server as specified by the
28 input containing the server name.

1 22. The computer program product of claim 21 wherein the
2 server name context on the server comprises a set of
3 resources associated with a server name.